

---

## Preface

The fluorescence light microscope has become a common tool in the life sciences, with broad applications in many fields of biology. Recent decades have seen a rapid development in the field, with the introduction of many new techniques to visualize and quantify biological samples at a molecular level.

This book aims to provide an overview of the advanced methods in fluorescence microscopy that have found application in biology, or that are promising to become essential tools in the future. Each chapter focuses on a different method and attempts to provide a practical guide for application in biological systems.

With this book we attempted to cover a broad range of advanced fluorescence microscopy methods. In several cases, the instrumentation that is needed might not be easily available to the biologist, due to their novelty. In these cases, we have attempted to provide instructions for building such equipment, along with protocols for their application.

For some time now, fluorescence microscopy has been a standard tool for the molecular biologist in such fields as cell biology, neurobiology, and development biology. As they become more readily available, the new tools described here will be of tremendous use to those same scientists. We hope that this book will help them to apply these methods in the biological systems that they are interested in.

*Dortmund, Germany*

*Peter J. Verwee*



Advanced Fluorescence Microscopy

Methods and Protocols

Verveer, P.J. (Ed.)

2015, XI, 294 p. 86 illus., 65 illus. in color., Hardcover

ISBN: 978-1-4939-2079-2

A product of Humana Press